



In response to identified water resource needs, legislative directives, and demands of Florida citizens, an action plan has been developed to help restore the ecological health of Lake Okeechobee and the St. Lucie and Caloosahatchee Estuaries. Key state agencies charged with carrying out this plan include the South Florida Water Management District (SFWMD), the Department of Environmental Protection (FDEP), the Department of Agriculture and Consumer Services (FDACS) and the Department of Community Affairs (FDCA).

Through the leadership of the Governor and Legislature, initial funding has been provided for a series of “fast-track” capital projects to help provide meaningful water quality improvements:

Complete by 2009

▪ Lake Okeechobee Fast Track Projects

The Lake Okeechobee Fast Track projects include the following components: an 800-plus acre expansion of the Nubbin Slough Stormwater Treatment Area (STA); the construction of a 4,000-acre reservoir in Taylor Creek; the construction of another 2,700-acre STA at Lakeside Ranch (south and west of Nubbin Slough); the re-routing of flows from the S-133 and S-191 basins to the Lakeside Ranch STA; and, potentially, the re-routing of flows from the S-154 basin also to the Lakeside Ranch STA. The combined storage and phosphorus reduction benefits are estimated at 48,000 acre feet and 65 to 75 metric tons, respectively.

Fast Track Lead Agency: SFWMD

Fast Track Supporting Agencies: USACE, FDEP

Other LOER Plan Components

In addition to the “turn-dirt” construction projects, several other far-reaching and innovative components – some which do not require large capital outlay – can also provide more immediate and measurable improvements in the condition of Lake Okeechobee, the St. Lucie Estuary and the Caloosahatchee Estuary. Combined, these initiatives comprise a bold and aggressive recovery plan.

Complete non-structural revisions by 2006

Complete full implementation — with structural changes in place — by 2010

▪ Revise Lake Okeechobee Regulation Schedule

To help achieve a better balance among management objectives – flood control, water supply and navigation, and the competing needs of the lake, estuaries and greater Everglades ecosystem – the U.S. Army Corps of Engineers (USACE) will revise the lake regulation schedule by December 2006. The ultimate goal is to achieve lower lake water levels and reduce high volume discharges to the estuaries.

As structural components, such as the Acceler8 reservoirs are completed, the USACE will continue to revise the schedule. The SFWMD and other supporting agencies will be working in tandem to revisit water supply demand estimates, supply side management strategies and the modeling and design of forward pumps.

Lead Agency: USACE

Supporting Agencies: SFWMD, FDEP, FDACS, the Florida Fish and Wildlife Conservation Commission (FWC), and the U.S. Fish and Wildlife Service (USFWS) (Federal)

Complete by 2007

- Establish Total Maximum Daily Loads (TMDLs) for Lake Okeechobee tributaries

Currently, Total Maximum Daily Loads (TMDLs) are to be developed for tributaries in the Lake Okeechobee watershed by September 2011. Because TMDLs scientifically establish the pollutant reductions necessary to restore water quality, it is essential that they be adopted as quickly as possible. Therefore, FDEP will accelerate the development of TMDLs for tributaries within the Lake Okeechobee watershed and will complete them by 2007. This work will be accompanied by the development of a basin management action plan with local stakeholders, which will identify the specific actions to be taken by all parties to restore water quality and incorporate the elements of this acceleration plan. FDEP also will continue to develop and implement TMDLs for the St. Lucie and Caloosahatchee tributaries and estuaries.

Lead Agency: Florida Department of Environmental Protection (FDEP)

Supporting Agencies: SFWMD, FDACS

Complete by 2008

- Implement mandatory fertilizer Best Management Practices (BMPs) (revised application rates for agriculture; low phosphorus for urban use)

FDACS, in conjunction with Institute of Food and Agricultural Sciences (IFAS), will re-assess recommended phosphorus application rates for agricultural crops and revise FDACS BMP rules appropriately. The revised recommendations will be a required component of the landowner's BMP implementation plan. FDACS will also facilitate the development and use of a low phosphorus fertilizer for urban settings in the Lake Okeechobee, St. Lucie Estuary and Caloosahatchee Estuary watersheds. These actions will reduce farm and urban phosphorus loads by 116 metric tons.

Lead Agency: FDACS

Supporting Agencies: FDEP, SFWMD, IFAS, local governments

Complete by 2008

- Implement revised Environmental Resource Permit (ERP) criteria for new development for the Upper and Lower Kissimmee, Lake Okeechobee, St. Lucie Estuary and Caloosahatchee Estuary Basins

The Lake Okeechobee Protection Act (LOPA) currently requires activities that result in a "land use change" to demonstrate that they will not increase the current phosphorus load discharging off-site. However, initiation of these activities provides an opportunity to improve upon the existing condition with minimal economic impact. Through the use of best management practices and stormwater management systems a net 25% to 50% reduction in the current phosphorus load discharging off of a parcel is anticipated to have a measurable improvement downstream and will be one of the provisions of the revised ERP.

Lead Agency: SFWMD

Supporting Agencies: FDEP and FDACS

Complete by 2008

- Identify options for storage and/or disposal of excess surface water

Areas inside the SFWMD boundaries – both public and private – may have available capacity and the potential to store Lake Okeechobee and/or tributary basin waters when there is a surplus in the watershed to prevent these excesses from impacting the estuaries. It may be possible for facilities to be constructed to deliver such excess waters under a management schedule that would be beneficial to the lake and St. Lucie and Caloosahatchee estuaries while not impacting current water supply demands.

LAKE OKEECHOBEE & ESTUARY RECOVERY -- *A bold and aggressive action plan*

Lead Agency: SFWMD

Supporting Agencies: FDEP, local governments

Complete by 2010

- Implement growth management programs to encourage innovative land use planning to facilitate acquisition of lands for public works

Innovative land use planning techniques will be developed by the Department of Community Affairs, in partnership with affected local governments, the regional planning council, the Department of Environmental Protection, and water management districts. One example is the Rural Lands Stewardship Areas Program which provides that counties designate all or portions of lands classified in the future land use element as predominantly agricultural, rural, open, open-rural, or a substantively equivalent land use, as a rural land stewardship area.

Within these areas, planning and economic incentives are applied to encourage the implementation of innovative and flexible planning and development strategies and creative land use planning techniques. This and other land use planning techniques, such as clustering development and transferable development rights, are tools to facilitate the construction of public works projects and the acquisition of lands necessary to protect and restore the watershed and downstream receiving water bodies.

Lead Agency: Department of Community Affairs (FDCA)

Supporting Agencies: Local Governments, WMDs, and FDEP

Complete by 2011

- Elimination of land applications of domestic wastewater residuals

Domestic wastewater residuals, including Class AA residuals, contain nutrients. These residuals continue to be imported and land applied in phosphorus sensitive basins. The volume of residuals being land applied in the Lake Okeechobee basin, which extends northward to include the Upper and Lower Kissimmee Basins, has decreased but the material still being applied is contributing excessive nutrients to already ecologically degraded systems. However, the amount of material in the St. Lucie Estuary and Caloosahatchee Estuary watersheds has been increasing. Steps need to be taken to eliminate the land application of residuals within these watersheds to remove a nutrient loading source from the system. This will prevent over 600 metric tons of phosphorus from being land applied in the watersheds.

Lead Agency: FDEP

Supporting Agencies: FDACS, SFWMD

Complete by 2015:

- Full implementation of the Lake Okeechobee Protection Program and the CERP Lake Okeechobee Watershed Project

The SFWMD, in cooperation with FDEP and FDACS, developed the Lake Okeechobee Protection Plan (LOPP) as required by the Lake Okeechobee Protection Act. The LOPP contains a phased, watershed-based comprehensive approach to reduce phosphorus loading to the lake, as specified in the adopted Total Maximum Daily Load (TMDL) for the lake. Numerous activities and projects in the watershed are currently being planned and implemented by the coordinating agencies. These activities include the implementation of phosphorus source control programs including on-site Best Management Practices and regional water detention and phosphorus control projects, restoration of isolated wetlands, and in-lake remediation activities. In addition, the Lake Okeechobee Watershed Project (LOWP) of CERP will provide substantial amounts of water storage and approximately 39% of the load reduction needed to meet the TMDL. Continued support of this program through 2015 is imperative.

Lead Agencies: SFWMD, FDEP, FDACS, and USACE

Supporting Agencies: University of Florida - Institute of Food and Agricultural Sciences (UF-IFAS), Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture (USDA), FWC, USFWS, local governments

- Additional Challenges for Action Plan Partners

Local Governments

- Work with the 9 County Coalition for Responsible Management of Lake Okeechobee and the St. Lucie and Caloosahatchee Estuaries and Lake Worth Lagoon to develop local government consensus on Lake and Estuary issues/needs
- Implement stormwater utilities and stormwater retrofit projects
- Partnerships to creatively use existing public lands for water quality retrofit projects
- Assist with BMP implementation for low phosphorus fertilizer in urban settings
- Move forward to convert residential septic tank systems to central sewer
- Step up land acquisition for preservation and restoration

Florida Inland Navigation District

- Remove sediments and stabilize the banks of the St. Lucie

U.S. Army Corps of Engineers

- Replace structures S-308 and S-77 with top or mid-water release instead of the current bottom water release to reduce sediments moving into the St. Lucie and Caloosahatchee

U.S. Congress

- Authorize the Water Resources Development Act Indian River Lagoon PIR
- Implement the Modified Water Deliveries project